

# UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

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SANTA BARBARA • SANTA CRUZ

SCHOOL OF MEDICINE  
Department of Microbiology  
and Immunology

SAN FRANCISCO, CALIFORNIA 94143

March 4, 1986

To: Members of the Human Retrovirus Subcommittee

From: Harold Varmus

Everyone should by now have received Bob Gallo's formal proposal for the use of HTLV-3/LAV or LAV/HTLV-3 as the name of the causative agent of AIDS. In case you have not, I enclose a copy of it, as well as a copy of his letter of February 5, which some of you have not received.

I am writing to request that you respond promptly by express mail to Bob's proposal, using the attached form to indicate your views. I believe that the considerable correspondence we have had over the past year includes virtually all of the arguments to be made for and against this proposal, so I will not reiterate them here. But I urge each of you to review past materials and give careful thought to what I hope will serve as a final verdict on this important question.

I do feel obliged to comment briefly upon the two points about the name human immunodeficiency virus (HIV) raised in the final paragraph of Bob's recent letter. His comments address the speculative problems implicit in the pathogenetically-based nomenclature that retrovirologists (among others) have traditionally used: how to differentiate genetically different viruses that happen to cause the same or similar diseases and how to designate genetically highly related viruses that differ in pathological potential. (Note that parallel concerns afflict nomenclature based upon cell tropism: how to differentiate genetically distinct viruses that happen to exhibit tropism for the same cell type, perhaps even using different receptors in the same cell, and how to designate genetically similar viruses that appear to differ in tropism.)

(i) Future virus isolates, unrelated to the cause of AIDS but inducers of immunodeficiency of any type, would be given names other than HIV, even if they are retroviruses. I share Bob's previously stated faith in the retentive powers of medical students and practitioners, so I believe that the link between HIV and AIDS would become quickly and unambiguously established. As for distinguishing between T and B cell immunodeficiency, the term "AIDS" does not refer to T cells, and I don't think it is necessary for the name of the virus to do so either.

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(ii) Future virus isolates, partially related to the AIDS virus but apparently non-pathogenic, would probably be dealt with in the following manner, based upon my consultations with several of you. Viruses very highly related to the prototypes (e.g. over 50% nucleotide sequence identity) should be called substrains of HIV; it is quite possible that already existing isolates, particularly from healthy high-risk populations, will prove to meet these criteria. Viruses clearly different on molecular grounds (e.g. less than 20% nucleotide sequence identity) present only the problem of finding an appropriate new name. I agree with Bob that any demonstrably non-pathogenic viruses in the grey area (e.g. 20-50% nucleotide sequence identity) should also be given new names, once their characteristics have been thoroughly studied. (Until we know the appropriate genetic and biological facts about the recent isolates from Max Essex's lab mentioned in Bob's letter, I do not think it is proper for me to comment upon final names for them.) If we should ultimately agree upon the previously circulated letter in favor of HIV, I would propose to add a final point on this issue as follows: "(vii) Any future isolates of human retroviruses with clear but limited relationship to isolates of HIV (e.g. more than 20% but less than 50% nucleic acid identity) should not be called HIV unless there are compelling biological similarities to existing members of the group."

Finally, the lesson I think we have all learned from our extended exercise in nomenclature is that no name is perfect and that we should aim to settle upon one that raises the fewest and least severe objections. With this objective in mind, I hope that we can show a sometimes skeptical public that, despite unresolved differences of opinion, we can come to an amicable agreement that fosters easy communication among us. Thus, though my own preferences are clear, I am prepared to sign and advertise whatever agreement gathers the most support. In hopes that all of us who agreed to deliberate on this trying matter will now agree to support the resolution we reach, I have phrased the attached form to learn about preferences rather than opposition. Please return it to me today.